

The Pollok Memorial Prize.

The Department of State has given notice to the various governments of the "Anthony Pollok Memorial Prize," to which we have already referred on two occasions. According to this notification, Mr. Pollok's name is prominently connected with many of the most important inventions of the last half of the nineteenth century, and he will always be remembered as a potent factor in the development of the patent system. The document states:

"He cherished a dream of universal patent practice embracing all nations of the world, and inspired in France the first step toward its realization in the International Convention for the Protection of Industrial Property, of which he was vice-president. When the United States at first withheld its adherence, he aroused the interest of manufacturers, and appeared twice before the Committee on Foreign Affairs of the United States House of Representatives, answering objections and advocating the measure in printed briefs and oral arguments, finally attained the object of his efforts.

"With sorrowing hearts and profound regret those who loved him, and deplored his loss, have founded this prize in sacred remembrance of their affection, and as a crowning monument to honor and perpetuate the memory of Anthony Pollok."

The prize consists of one hundred thousand (100,000) francs (\$20,000) and is to be awarded to the inventor of the best apparatus for the saving of life in case of maritime disaster and is to be open to universal competition. This sum is on deposit with the American Security and Trust Company, of Washington, D. C., and will be paid over to the successful competitor when the decision shall have been rendered by the appointed jury and formally communicated to the Secretary of State of the United States through the Commissioner-General of the United States to the International Exposition of 1900. The juror selected on behalf of the government of the United States is Lieut. William S. Sims, U. S. N., Naval Attaché of the Embassy of the United States at Paris.

The Committee of the Pollok Memorial Prize has formulated rules and regulations which will be subject to revision by the Jury of Award in Paris, but it is not anticipated that any material change will be made, and should such changes be made, notice will be given to the applicants.

We give below full text of the rules as issued, and for further information our readers are requested to address William Ker, Secretary, 1405 G Street, Washington, D. C.:

"The jury shall have power to dispose of the prize in the following manner:

"First. It may award the entire amount of 100,000 francs to one person submitting the best original apparatus or device for the saving of life in cases of disaster at sea, provided it is, in the opinion of the commission, of sufficient value to the world to justify the award.

"Second. In case two or more persons shall submit devices which seem to the jury to be of equal or nearly equal value, there may be awarded to the several inventors thereof such a ratable proportion of the entire sum as the commission may deem just; or

"Third. In case none of the devices presented shall be deemed by the jury of sufficient value to justify the giving thereof of the prize offered, the jury may reject all, but may reimburse any competing inventor for his expenses, wholly, or in such part as it may judge proper.

"The jury will make all necessary rules and regulations for its government and procedure not inconsistent with the conditions herein stated.

"Instructions to Competitors.—Persons desiring to compete must comply with the following instructions:

"Each competitor shall submit a working model of his apparatus or device, together with accurate scale drawings, full size when practicable being preferred, but drawings to a large scale will be accepted. These must be accompanied with a statement in writing containing the following information concerning the apparatus or device:

"First. Name. Second. Detailed description. Third. Nomenclature of each separate part, stated in list form with reference letters corresponding to letters on accompanying drawing. Fourth. Construction, stating method of manufacture or fabrication in detail. Fifth. Kinds and quantities of materials used in construction. Sixth. Dimensions of all parts. Seventh. Weights of principal parts, and total weight of apparatus or device. Eighth. Description of method of using. Ninth. Claims of inventor for device, set forth specifically, in full, and in numerical order. Tenth. Whether device or any of its parts is covered by letters patent or caveat in any country. If patented, in what country or countries, giving registered number or numbers of patent or patents. Eleventh. Estimated cost at which it may be furnished. Twelfth. Whether it has ever been actually used or tried? If so, when, where, and with what results? Thirteenth. All devices submitted must be delivered at the expense of the inventor or agent at the time and place appointed, and returned at the expense of said inventor or agent when no longer required by the jury. Fourteenth. All expenses connected with

the trial and testing of the apparatus or device, if trial or test be deemed necessary, shall be borne by the inventor or his agent, but the commission will afford such facilities as may be convenient and practicable. Fifteenth. In passing upon the merits of the devices, the jury will take into consideration not only their values as preservers of life when once in the water, but in case of appliances which depend upon the aid of persons other than those to be rescued (such as boats, rafts, etc., as distinguished from life preservers and the like), it will take into account the facility and safety with which they may be detached or launched from the vessel under any conditions. The extra weight of the device or apparatus, its facility for carriage upon the vessel, the space occupied, its capacity and adaptability for carrying numbers of persons, the means of sustaining life when in the water, its seaworthiness, its durability, and its cost of maintenance in service will all be considered.

"The competition will also include devices designed to save life by preventing a vessel from sinking at sea as the result of collision with another vessel, an iceberg, or other object. The foregoing requirements, so far as applicable, must be complied with by competitors."

A TOKEN OF APPRECIATION.

From time to time we receive kind words from our subscribers relative to the SCIENTIFIC AMERICAN, and we highly appreciate all such tokens of interest. We were indeed greatly surprised to receive, a few days ago, a gold medal, which was presented to us by Mr. T. R. Bowman, of "Waverley," South Terrace, Adelaide, South Australia. His letter is as gratifying in itself as is the handsome medal.

He says: "I forward this trifle to the Editors of the SCIENTIFIC AMERICAN as a souvenir of thanks for the many favors, information, and instruction I have derived from the perusal of the SCIENTIFIC AMERICAN for the last twenty-seven years; also for your kindness in giving me at different times information by letters."

The medal itself measures 1 3/8 inches in diameter, and consists of a plain gold ring, which circumscribes another gold ring of a differently colored gold. The

**MEDAL PRESENTED TO SCIENTIFIC AMERICAN.**

second ring is deeply chased; then comes the medal itself, which was executed by F. Basse, jeweler to His Excellency the Governor. The obverse has a heraldic design bearing the words "Advance Australia," and the date, "1899. On the reverse are the words "Messrs. Munn & Co., SCIENTIFIC AMERICAN, New York, from T. R. Bowman, South Australia."

Kind words are always encouraging, and Mr. Bowman's thoughtfulness in sending the medal is much appreciated.

Royal Letters from Babylon.

Under the auspices of the British Museum, Mr. King, of the Department of Oriental Antiquities, has collected a series of ancient documents which have been published under the title of "The Letters and Inscriptions of Khammurabi, King of Babylon, about B. C. 2200." A few years ago the dark hiding place of Dier-el-Bahri yielded up the bodies of the greatest of the Egyptian Pharaohs, and in February of this year some more of these august rulers of Nile land were recovered at Thebes. But it is in the field of Oriental literature that the greatest of our recent discoveries have been made. Nothing has been so astonishing as the universality of the literary remains. It is not only royal records, or a few votive inscriptions, telling us, in grandiloquent terms, the mighty deeds of some Babylonian or Egyptian ruler, that have been brought to light. The literature of these records of the past is far more extensive and wide-embracing in its character, and the astonishing fact is revealed that more than twenty centuries before the Christian era the art of writing was not confined to the classes, but had been acquired by a large portion of the masses. Formerly the earliest record of letter writing was the treacherous missive sent to Joab by the hand of Uriah the Hittite, which may approximately be placed about B. C. 1000. Still there was little indication that the attainment of this power was general at this period, or in the later age of Solomon.

Some ten years ago a most important find of tablets was made by native diggers in Babylonia. The site from which they were obtained was the mound of Tel-Sifr, the site of the ancient city of Larsa—the Ellasar of Genesis xiv. This city, about B. C. 2300, was of great importance. The whole of the land had been swept by a terrible invasion of the Elamites, and,

both Erech and Ur being destroyed, a temporary capital was established at Larsa. But a new power was rising, which eventually was to found forever the great Babylonian Empire. The gradual infiltration of the Arabs into Babylonia had been going on for centuries, and at last an Arab dynasty established itself in Babylonia, making Babylon its center. Gradually, by the wonderful organizing power which the Semites have always shown, they established themselves as rulers of the whole land, and in B. C. 2200 the great King Khammurabi—whom there is much reason to regard as the Amraphel of Genesis xiv.—was king paramount over all Babylonia, and claimed for himself the title of "builder of the empire."

Among the inscriptions found at Tel-Sifr are a number of letters, forty-six of which are written by Khammurabi to the petty ruler of the city of Larsa. These letters, then, carry us back more than seven centuries in the history and antiquity of letter writing. The importance of this discovery, now developed by Mr. Leonard King, is very great, as they come as contemporary and confirmatory records of this most important period in Oriental history. Written on little clay tablets about three inches long and two wide, they are certainly the oldest letters in the world. Their value is much enhanced by the fact that they belong to a period to which there is every reason to assign the date of the migration of Abram. To the subject of Biblical historical criticism they are of great importance.

On the first examination of the tablets, Mr. King was struck with the resemblance which the name copied by Scheil presented to the name of a Babylonian general mentioned in the Museum letters. A copy of the Constantinople letter being obtained by photographs, it was shown that the name of Kuderlagamar did not exist, but that of Inukh Samar, a Babylonian general, instead. It is now found that there are three tablets which form a series relating to an important war with Elam, probably late in the reign of Khammurabi. One of them refers to the capture of certain Elamite statues of goddesses, and the Babylonian king writes to his subordinate requesting them to be sent to Babylon.

In this letter we read: "To Sin-iddina thus speaks Khammurabi (the King) Zikha-ili-su, and Khammurabi-bani the Vizier in regard to the goddesses as messengers I send. As in a temple the goddesses in barks (sacred ships) cause them to ride. To Babylon may they bring them. The female bodyguard after them let them be brought. For the offerings of the goddesses let four fat rams be provided. Appoint a bodyguard. The goddesses to Babylon may they bring in safety; let them not delay. Quickly in Babylon may they arrive." The next tablet in the series is the one published by Icheil. The statues having arrived in Babylon, some evil appears to have happened, which was attributed to their anger, and so the king desires to return them to their native shrines. But this must be done in such a way as not to display weakness—and thus the king's orders are as follows:

"To Sin-iddina speaks thus Khammurabi (the King): The goddesses of Elam which are intrusted to thee, the troops under the command of Inukh-Samar will bring safely to thee, with the troops that are in thy hands attack the people (Elamites), and the goddesses to their shrines let them go in safety." It is evident that force had to be employed to restore the divinities to their shrine. The military genius of this ancient king is well shown in these letters. In one he writes that certain men who were sent guards of the great gate had not gone to their posts: "Send," he says, "and let them bring these men to them and place a guard over them, and send them to Babylon." In another letter he writes: "For the troops of Imgur Bel and under the command of Rimmanirisu. Sent teams, let them be brought, and a march make. Let them arrive in two days."—London Standard.

A Western View of Our Canals.

"Expert engineers all agree that the usefulness of the Erie Canal as a highway of commerce is practically ended," says The Detroit News-Tribune. "Traffic is falling off so rapidly that soon it will be of insignificant proportions. The State has recently thrown away \$9,000,000 in work which does not afford a penny in return. The proposed expenditure of \$15,000,000 more to complete a 9-foot channel is regarded as a useless waste of money, because no waterway which requires a breaking of bulk and transfer of freight from lake shipping at Buffalo can hope to compete with the railroads. On the other hand, it is the universal opinion that through traffic from the lake ports to New York by means of a ship canal will always hold its own against railroad competition. The Erie Canal, once the main avenue of travel and commerce between the East and the West, has passed its day of usefulness like the old stage coach. It has become a source of great inconvenience in the cities of Rochester, Syracuse, and other large towns. The lake route would enable the State to abandon the unused portions of the big ditch, and wherever it is in the way it could be filled up and the ground occupied for other purposes."